

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): An optical scanning apparatus adapted to perform parallel scanning with a plurality of beams on an image recording medium at predetermined pitches, said apparatus comprising:

two semiconductor laser light sources each including a plurality of light emitting devices arranged in a line at equal intervals;

a beam scanner;

a beam converging unit disposed between the laser light sources and the beam scanner for converging the light beams onto the surface of the beam scanner; and

a controller for ~~always~~ individually controlling an inclination angle of an arrangement direction of said ~~plurality of~~ light emitting devices of each of said semiconductor laser light sources with respect to a beam scanning direction of each of said semiconductor laser light sources,

wherein said inclination angle ~~satisfies the equation: $\sin^{-1}[p/md]$, wherein, d is an interval between adjacent ones of said light emitting devices, p is a predetermined interval between adjacent ones of said light beams on a scanning surface, and m is magnification of the optical scanning apparatus~~ of each of said semiconductor laser light sources is detected and controlled so

that all beam intervals on a scanning surface are kept in a predetermined equal value, during recording operation.

2. (currently amended): The optical scanning apparatus according to claim 1, ~~further comprising another controller for detecting a shift in time interval between moments, at which output beams of each of said light sources pass a photodetector provided in vicinity of a beam scanning start edge, and for adjusting the incline angle of each of said light sources wherein said~~ controller includes a detecting means for a shift in time interval between moments, at which at least two reference beams from each of said light sources pass a photo-detector provided in the vicinity of a beam scanning start position, and adjusting means for the incline angle for each of said light sources respectively, depending on said shift in time interval.

3. (currently amended): An optical scanning apparatus adapted to perform parallel scanning with a plurality of beams on an image recording medium ~~at predetermined pitches~~, said apparatus comprising:

two semiconductor laser light sources each including a plurality of light emitting devices arranged in a line at equal intervals;

a beam scanner;

a beam converging unit disposed between the laser light sources and the beam scanner for converging the light beams onto the surface of the beam scanner; and

a controller for ~~always detecting a position in a direction perpendicular to a scanning direction of output beams of each of said light sources even during beam scanning and for controlling a predetermined pitch interval of scanning lines owing to variation in relative position of each of said light sources~~ controlling a beam interval in the perpendicular direction to a beam scanning direction between scanning beams out of said laser light sources respectively,

wherein said controller ~~detects the positions of the output beams with photodetectors that are irradiated by light from a polarizing prism which is disposed between said laser light sources and said beam scanner~~ comprises detecting means for scanning positions of a reference beam specified respectively from output beams out of each of said laser light sources, and keeping means for the beam interval between said reference beams in a predetermined value, during recording operation.

4. (currently amended): An optical scanning apparatus adapted to perform simultaneous parallel scanning with a plurality of beams on an image recording medium at predetermined pitches, said apparatus comprising:

two semiconductor laser light sources each including a plurality of light emitting devices arranged in a line at equal intervals;

a beam scanner;

a beam converging unit ~~disposed between the laser light sources and the beam scanner~~ for converging the light beams onto ~~the surface~~ reflective surfaces of the beam scanner; and

a controller ~~for always controlling a position in a direction perpendicular both for~~
~~individually to a beam scanning direction of output beams of each of said light sources and~~
controlling an inclination angle of an arrangement direction of said ~~plurality of~~ light emitting
devices ~~with respect in to the beam scanning direction of each of said semiconductor laser light~~
~~sources;~~

~~wherein said inclination angle satisfies the equation: $\sin^{-1}[p/md]$, wherein, d is an interval~~
~~between adjacent ones of said light emitting devices, p is a predetermined interval between~~
~~adjacent ones of said light beams on a scanning surface, and m is magnification of the optical~~
~~scanning apparatus~~

sources with respect to a beam scanning direction and for controlling a relative beam
interval distance in the perpendicular direction to the beam scanning direction between reference
beams specified respectively from each of said laser light sources, so that all scanning beam
intervals on said recording medium are kept equally in a predetermined value, during recording
operations.

Claims 5-9 (canceled).

10. (currently amended): An optical scanning apparatus comprising:
a first semiconductor light source including a plurality of light emitting devices arranged
in a line at equal intervals;

a second semiconductor light source including a plurality of light emitting devices arranged in a line at equal intervals;

a first controller for individually controlling an inclination angle of ~~the plurality an~~ arrangement direction of said light emitting devices with respect to a beam scanning direction of ~~each of~~ the first and the second semiconductor light sources respectively so that an interval between scanning portions from each of said semiconductor light sources on a scanning surface becomes a predetermined interval between scanning beams; and

a second controller for controlling a relative interval distance between ~~scanning positions~~ in a direction perpendicular to a scanning direction of the beams so that an interval between adjacent beams specified respectively from the first semiconductor light source and the second semiconductor light source, so that said interval distance between said beams specified on a scanning surface becomes the predetermined value or a multiple of the predetermined value.

11. (currently amended): The optical scanning apparatus according to claim 10,
wherein ~~an interval between adjacent~~ all intervals of scanning beams on a recording medium formed by output beams from light emitting devices of both the first semiconductor light source[,] and ~~that of~~ the second semiconductor light source are equal to each other.
